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## EDITOR'S NOTES:

### Please, Choose Well

If I got down on my hands and knees and begged you to take better care of yourself, would it make a difference in what foods you chose to eat from now on? I've been educating people for more than 30 years on the importance of eating well, exercising daily, and taking care of themselves. I started years ago with a gentle message. I've gotten much tougher over the years. I'm even ready to get down on my knees and beg. Yet, Americans are doing worse today than they were several decades ago. In fact, a study from Oregon State University just reported that fewer than 3% of Americans eat right, exercise, are at a healthy weight, and don't smoke. (*Mayo Clinic Proceedings* 2016; March 21st)

I don't get it. We are given this amazing opportunity to live on this gem of a planet floating in an infinite universe. No life has yet been found anywhere else in the universe. Yet, here we are. We don't get much time, maybe 80 years if we are lucky. Every minute, hour, month, year, and decade counts. We also are given only one body and one brain in this lifetime. The only place that brain and body get their building blocks is from the foods we choose to eat. Eat foods that fuel that brain and body - i.e., colorful fruits and vegetables, 100% whole grains, legumes, nuts and seeds, fatty fish, calcium-rich sources, and a little lean meat - and we thrive, stacking the deck in favor of enjoying every last minute of our blessed moment on this planet. Yet, most of us are eating the Western diet proven to undermine health and energy, increase diseases from heart disease to dementia, cause excessive weight gain, increase medication use, and shorten life. Our self-care is so poor that it is breaking the back of the healthcare industry, not to mention devastating our opportunity to live joyful, robust, passionate and energetic lives.

It's not like we don't have a choice. While many people living in poverty elsewhere in the world must eat what they can get, Americans have access to an abundance of foods. Granted, not everyone can afford blueberries out of season or wild Alaskan salmon. But, most healthy foods are cheap, from oats to carrots. Pound for pound, potatoes are much cheaper than potato chips. Instead, we make choices based on immediate gratification. Rather than take the time to think before we eat, we grab-and-go what is easy to reach and goes down sweet. We spend considerably less of our hard-earned dollars today on food cooked at home than ever before. That leaves more money for gadgets and medication. Shame on us! For Americans to live in a food-abundant country - with so many people starving in the world - to choose highly processed, disease-causing, obesity-generating junk food is a crime.

I recognize that food companies have manipulated our food choices, enticing us to choose modern-day, processed foods that are as alien to our bodies as breathing in carbon monoxide. A Civil War soldier wouldn't recognize the tens of thousands of boxed, bagged, cartoned, canned, and wrapped junk in our grocery stores. Today every cupboard in American is spilling over with food-like products made from refined grains, added sugar, salt, fat, and chemicals designed to mimic real food. The marketing is clever and the ingredients are addicting. It is a food war out there: them against us. We must engage our higher brain center, the cortex, to make food decisions or our lower brain centers, call them the animal brain, will react instead of think.

So, here I am down on my knees. Please, please choose wisely for your health today and your chance to enjoy fully every minute you have left in this lifetime!

Elizabeth Somer, M.A.,R.D.



Elizabeth Somer

### Start 'em Young!

Consuming a high-fiber diet early in life lowers breast cancer risk down the road, according to researchers at Harvard Medical School. Dietary questionnaires were completed by 90,534 premenopausal women in 1991. During the 20-year follow-up, 2,833 cases of breast cancer were reported. In 1998, 44,263 of these women also completed questionnaires about their diets during high school with 1,118 breast cancer cases documented in this cohort. Results showed that among all women, early high dietary fiber intake was linked with a lower risk for developing breast cancer. Higher intakes of soluble fiber lowered risk by 14% and insoluble fiber lowered risk by 20%. Fiber intake in adolescence also was a factor in breast cancer risk later in life. The researchers conclude that, "...higher fiber intakes reduce breast cancer risk and ... intake during adolescence and early adulthood may be particularly important."

*Farvid M, Eliassen A, Cho E, et al: Dietary fiber intake in young adults and breast cancer risk. Pediatrics 2016; 137:1-11.*

## INSIDE THIS ISSUE:

- DHA and Alzheimer's.....2
- Life's Simple Seven.....3
- Vitamins and cancer.....4
- Zinc and immunity.....5
- Vegan short-falls.....6
- Flavonoids for weight Loss.....7



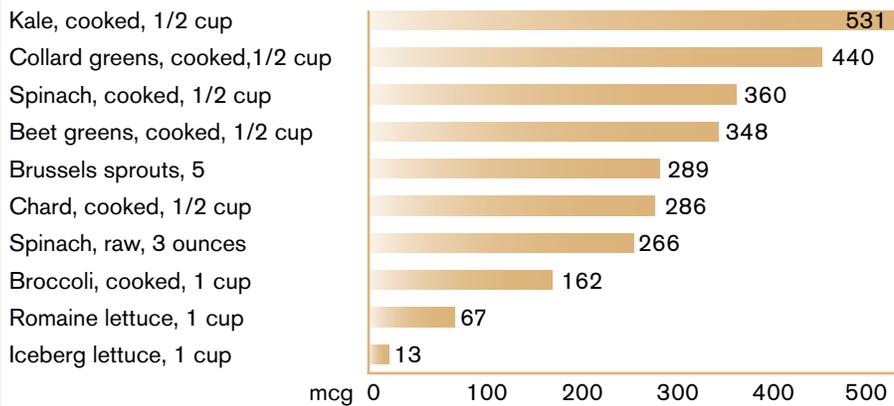
## Vitamin K for Memory

As if the lutein for eyes, the iron for blood, and the folic acid for preventing birth defects wasn't enough. Now researchers at University of Angers in France report that the vitamin K in dark greens also protects memory. Daily dietary vitamin K intake was assessed in 160 older adults and was compared to subjective memory complaints using the Memory Complaint Questionnaire. Results showed that people with serious

subjective memory complaints consumed about 100 mcg/day less of dietary vitamin K compared to people whose memory was not a problem. The researchers conclude that increased dietary vitamin K intake is associated with fewer and less severe subjective memory complaints in older adults.

*Soutif-Veillon A, Ferland G, Rolland Y, et al: Increased dietary vitamin K intake is associated with less severe subjective memory complaint among older adults. Maturitas 2016; February 11th.*

### What Foods Supply the Most Vitamin K?



## A Fat Solution to Depression

The omega-3s EPA and DHA lower depression and possibly dementia risk. Researchers at the College of Food Science and Technology in China reviewed the research on this topic. They state that these fats improve or prevent some psychiatric and neurodegenerative diseases in both experimental and clinical studies. DHA and EPA are important membrane components that benefit brain health by modulating pathways involved in immunity and abnormal cell death. They also change membrane function or compete with omega-6 fats that are the building blocks of inflammatory mediators, thus potentially lowering the risk for dementia and even Alzheimer's disease. The best EPA:DHA ratio for improving brain disorders remains unclear. It is also unknown whether EPA, as a DHA precursor, acts directly or via DHA.

The omega-3 DHA helps lower depres-

sion risk, but how? Researchers at Columbia University in New York found that DHA supplementation reduces abnormalities in the brain's white matter that otherwise are correlated with depression risk.

*Song C, Shieh C, Wu Y, et al: The role of omega-3 polyunsaturated fatty acids eicosapentaenoic and docosahexaenoic acids in the treatment of major depression and Alzheimer's disease. Progress in Lipid Research 2016; January 4th.*

*Chhetry B, Hezghia M, Miller J, et al: Omega-3 polyunsaturated fatty acid supplementation and white matter changes in major depression. Journal of Psychiatric Research 2016; 75:65-74.*

**HOTTOPIC:** While fat usually is satiating, highly salted processed foods override this effect on food intake, resulting in energy intakes 11% higher than otherwise would be consumed, according to researchers at Deakin University in Australia. *Journal of Nutrition 2016; March 2nd.*

## The Omega-3 DHA and Alzheimer's Connection

Researchers at the Ciudad University in Mexico have uncovered at least one of the ways the omega-3 fat DHA reduces Alzheimer's risk and improves cognition in the early stages of the disease. DHA generates oxygenated compounds called docosanoids that modulate inflammation, cell survival, and lipid metabolism. Inflammation is associated with excess amyloid beta peptide that contributes to nerve damage in the early stages of Alzheimer's. In addition, DHA modulates glial cell activity. Dysfunction of these cells is associated with the onset of Alzheimer's, since they give support to nerve cells, remove amyloid beta peptides from the brain, and modulate inflammation.

High blood levels of the omega-3s EPA and DHA were associated with improved cognitive function in seniors, in a study from the University of the Ryukyus, Japan.

*Heras-Sandoval D, Pedraza-Chaverri J, Perez-Rojas J: Role of docosahexaenoic acid in the modulation of glial cells in Alzheimer's disease. Journal of Neuroinflammation 2016; March 10th.*

*Nishihira J, Tokashiki T, Higashiesato Y, et al: Associations between serum omega-3 fatty acid levels and cognitive functions among community-dwelling octogenarians in Okinawa, Japan. Journal of Alzheimer's Disease 2016; February 16th.*

## The PMS Supplement

A combined supplement of calcium and vitamin B6 might help curb symptoms of premenstrual syndrome (PMS), state researchers at Hamadan University of Medical Sciences in Iran. In this double-blind, randomized, controlled study, 76 female college students were divided into two groups, with one group receiving daily 500 milligrams of calcium and 40 milligrams of vitamin B6, and the second group receiving only the vitamin B6 twice daily for two months. PMS symptoms were assessed by the Beck Depression Inventory and daily symptom records. Results showed that both groups showed improvements in symptoms, but the combination of calcium and vitamin B6 was significantly more effective.

*Masoumi S, Ataollahi M, Oshvandi K: Effect of combined use of calcium and vitamin B6 on premenstrual syndrome symptoms. Journal of Caring Sciences 2016; 5:67-73.*



## Seafood Good for the Brain

People who include seafood in their weekly diets have lower risks for developing Alzheimer's disease, state researchers at Rush University in Chicago. This study included 286 autopsied brains of 554 deceased participants whose average age at death was 89.9 years. Seafood intake had been first measured by a food frequency questionnaire at an average of 4.5 years before death and then repeated annually until death. Results showed that mercury levels positively correlated with seafood intake, but were not correlated with increased levels of brain neuropathology. In fact, as seafood intake went up, risk for Alzheimer's disease decreased, including fewer neuritic plaques, less severe and widespread neurofibrillary tangles, and lower neuropathologically defined Alzheimer disease. The researchers conclude that these findings suggest, "...that seafood can be consumed without substantial concern of mercury contamination diminishing its possible cognitive benefit in older adults."

*Morris M, Brockman J, Schneider J, et al: Association of seafood consumption, brain mercury level, and APOE e4 status with brain neuropathology in older adults. Journal of the American Medical Association 2016; 315:489-497.*

Children born to mothers who supplemented with a special form of folic acid show improved ability to pay attention later in life, according to a study from the University of Granada in Spain. The 136 children of mothers who received fish oils and/or 5-methyltetrahydrofolate (5-MTHF) during pregnancy were tested for attention span

## Healthy Heart, Healthy Brain

Follow the guidelines for maintaining a healthy heart and your memory might thank you for it down the road. In a study from Miami's Miller School of Medicine, researchers followed 1,033 seniors for six years. At the study's start, the seniors were tested for memory, thinking, and brain-processing speed. They also were evaluated for how closely they met the goals of "Life's Simple Seven," a list of heart-healthy habits created by the American Heart Association. None of the seniors met all seven goals and only 1% met six goals. Four percent met five of the goals, another 14% met four, 30% met three, 33% met two, and 15% met only one. The rest met none. At follow-up, the researchers found that the more of these seven habits the seniors had followed, the less deterioration in brain processing speed, memory, and executive function (i.e., ability to focus, organize, and time manage other cognitive skills). "The benefits of the heart health factors apply to all ages, and it is never too late to begin to make positive changes in lifestyle or make improvements in risk factors," the researchers conclude.

In a study from Concordia University in Montreal, researchers found that for every flight of stairs people climbed each day, their brain age was more than half a year younger. Daily activity, even dancing or gardening, increases brain volume in memory centers and lowers the risk for Alzheimer's by up to 50%, according to researchers at the University of California, Los Angeles. Finally, seniors who maintain arteries clear of calcium buildup are at lower risk for both heart disease and

dementia, according to researchers at the University of Pittsburgh.

*Gardener H, Wright C, Dong C, et al: Ideal cardiovascular health and cognitive aging in Northern Manhattan Study. Journal of the American Heart Association 2016; March 16th.*

*Steffener J, Habeck C, O'Shea D, et al: Differences between chronological and brain age are related to education and self-reported physical activity. Neurobiology and Aging 2016; 40:138-144.*

*Raji C, Merrill D, Eyre H, et al: Longitudinal relationships between caloric expenditure and gray matter in the Cardiovascular Health Study. Journal of Alzheimer's Disease 2016; March 11th.*

*Kuller L, Lopez O, Mackey R, et al: Subclinical cardiovascular disease and death, dementia, and coronary heart disease in patients 80+ years. Journal of the American College of Cardiology 2016; 67:1013-1022.*

### Life's Simple Seven

1. Manage blood pressure: It should be less than 120/80 mm/Hg
2. Control cholesterol levels: High cholesterol contributes to arterial plaque and blocked arteries.
3. Reduce blood sugar levels: High blood sugar damages the heart, kidneys, eyes, and nerves.
4. Get active: Aim for at least 150 minutes of moderate physical activity or 75 minutes of vigorous physical activity (or an equal combination of both) every week.
5. Eat better: Eat a variety of real foods from the food groups. Limit processed foods, salt, sugar, saturated fat, and trans fats.
6. Lose weight: Maintain a healthy weight to lower heart disease and mental decline.
7. Don't smoke: Smokers have a high risk of developing heart disease.

## Pay Attention Early On with Folate

at age 8.5-years-old. Results showed that children born to mothers supplemented with 5-MTHF alone solved response conflict challenges more quickly than did the placebo group. The researchers conclude that, "...folate supplementation during pregnancy... improves children's ability to solve response conflicts..indicating that

early nutrition influences the functionality of specific brain areas involved in executive functions."

*Catena A, Munoz-Machicao J, Torres-Expinola F, et al: Folate and long-chain polyunsaturated fatty acid supplementation during pregnancy has long-term effects on attention system of 8.5-y-old offspring. American Journal of Clinical Nutrition 2016;103:115-117.*



## Folic Acid Against Colon Cancer

Folic acid supplements might help lower colorectal cancer risk, especially in people with inflammatory bowel disease (IBD), according to a study from the University of Leeds, UK. Patients with IBD are at risk of folic acid deficiency because of intestinal malabsorption. Since poor folic acid status has been linked to a higher risk of colon cancer, the researchers set out to see if supplementation with this B vitamin in patients with IBD could lower their risk for the disease. This review of the research included ten studies reporting on a total of 4,517 patients. Results showed that folic acid

supplements lowered colorectal cancer risk by 42%. The researchers conclude that "...folic acid is a cheap, safe, and well-tolerated supplement that may have a role in the prevention of colorectal cancer."

**IN PERSPECTIVE:** *This year, there will be more than 134,000 cases of colon cancer reported, according to the U.S. National Cancer Institute estimates. Up to half of all those cases could be prevented with diet, weight management, and increased physical activity.*

*Burr N, Hull M, Subramanian V: Folic acid supplementation may reduce colorectal cancer risk in patients with inflammatory bowel disease. Journal of Clinical Gastroenterology 2016; February 22nd.*

## Six Habits That Reduce Colon Cancer Risk

The American Institute for Cancer Research has identified 6 habits that significantly lower a person's risk for colorectal cancer.

1. Maintain a healthy weight and control belly fat, which is linked to colon cancer regardless of body weight.
2. Exercise daily.
3. Eat a fiber-rich diet (for every 10 grams of fiber in the daily diet, colon cancer risk drops by 10%)
4. Reduce red meat consumption and eliminate processed meats, such as hot dogs, bacon, sausage, and deli meats.
5. Avoid alcohol or limit intake to no more than two standard drinks a day for men and one for women.
6. Go heavy on garlic.

## Vitamin C and Cervical Cancer

Vitamin C intake might be a factor in a woman's risk for cervical neoplasia, the uncontrolled growth of cells that results in tumors that may or may not be malignant. In this study from Peking Union Medical College in Beijing, researchers reviewed the research from 12 studies, including one prospective cohort study and 11 case-controlled studies. Overall, higher vitamin C intake was significantly associated with a reduced risk for cervical neoplasia. In addition, increasing vitamin C intake every day by as little as 50 milligrams further lowered risk.

*Cao D, Shen K, Li Z, et al: Association between vitamin C intake and the risk of cervical neoplasia. Nutrition and Cancer 2016;68:48-57.*

## Vitamin D for the Prostate

Prostate cancer is more aggressive in men with low vitamin D levels, according to a study from the Cleveland Clinic in Ohio. In the 190 men having their prostates removed, those with low vitamin D levels were more likely to have rapidly growing tumors compared to men with normal levels of the vitamin. Blood levels of the vitamin less than 30 ng/mL were associated with increased odds of aggressive disease. The researchers conclude that, "...[the blood vitamin D level] may serve as a useful biomarker in prostate cancer aggressiveness, which deserves continued study."

*Nyame Y, Murphy A, Bowen D, et al: Associations between serum vitamin D and adverse pathology in men undergoing radical prostatectomy. Journal of Clinical Oncology 2016; February 22nd.*

## The Diet Link to Lung Cancer

You don't need to smoke to develop lung cancer. According to a study from the University of Texas MD Anderson Cancer Center in Houston, eating a refined carbohydrate-rich diet increases lung cancer risk in non-smokers. The diet and health histories of more than 1,900 people with lung cancer were compared to about 2,400 people without the disease. Results showed that people in the top for consumption of high-glycemic carbohydrate-rich foods, such as refined grains and potatoes, had a 49% greater risk of developing lung cancer compared to those people who consumed the least amount of high glycemic carbohydrates. While the mechanism is poorly understood, the researchers speculate that high glycemic diets are linked to diabetes risk, which encourages the activity of certain cellular "growth factor" chemicals that are known to play a role in cancer.

Researches at Harvard T. H. Chan School of Public Health report that adding potatoes, especially French fries, to the diet increases the risk of developing type 2 diabetes independent of body mass index (BMI). Replacement of potatoes with 100% whole grains lowered diabetes risk in this study.

*Melkonian S, Daniel C, Ye Y, et al: Glycemic index, glycemic load, and lung cancer risk in non-Hispanic whites. Cancer Epidemiology, Biomarkers & Prevention 2016; March 4th.*

*Muraki I, Rimm E, Willett W, et al: Potato consumption and risk of type 2 diabetes. Diabetes Care 2016;39:376-384.*

**HOT TOPICS:** Poor vitamin B12 status in diabetic vegetarians was associated with increased oxidative stress, inflammatory markers, and fasting glucose, in a study from Yang Ming Hospital in Taiwan. *Nutrients 2016; February 28th.*

Vitamin B6 supplements reduced endothelial dysfunction, insulin resistance, and lipid accumulation in the liver in mice fed high-fat diets, in a study from Hunan Normal University in China. *Journal of Diabetes Research 2016;2016:1748065.*



## Seniors Low in B12

Low vitamin B12 levels have been linked to memory loss, which is why a study from the University of Waterloo finding that a significant number of seniors are low in this vitamin is a concern. In their study, the researchers found that almost 14% of seniors entering long-term care homes were deficient in vitamin B12, while another 38% were borderline deficient. Those who were taking supplements that contained vitamin B12 had higher blood levels of the vitamin. Untreated B12 deficiency leads to anemia and neurologic complications, such as unsteady gait, paralysis, depression, dementia, increased confusion, lethargy, and even osteoporosis, the researchers warn. They suggest that all seniors be screened annually for vitamin B12 status.

*Pfisterer K, Sharratt M, Heckman G, et al: Vitamin B12 status in older adults living in Ontario long-term care homes. Applied Physiology, Nutrition, and Metabolism 2016; January 19th.*

## Zinc Boost Immunity

Zinc supplementation improved immune function in seniors, in a study from Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University in Boston. In this randomized, double-blind, placebo-controlled study, 53 nursing home seniors were chosen. Of those, 31 were found to have low blood zinc levels and were given either 30 milligrams of zinc or placebos every day. After three months, zinc supplementation had increased blood levels of the mineral, but not always up to optimal levels. Immune tests showed enhanced T cell numbers in the supplemented group as well. The researchers conclude that zinc supplementation increases blood zinc concentrations and immune parameters in nursing home elderly; however, not all zinc-deficient elderly reach adequate concentrations. Larger doses may be needed for some older adults.

*Barnett J, Dao M, Hamer D: Effect of zinc supplementation on serum zinc concentration and T cell proliferation in nursing home elderly. American Journal of Clinical Nutrition 2016;103:942-951.*

## Exercise & Diet: The Fountain of Youth

The combination of a healthy diet and daily exercise slows cellular aging, which equates to a reduced risk for age-related diseases and possibly aging itself, according to a study from the Mayo Clinic in Rochester, Minne-



sota. In this study, researchers fed mice either a normal, healthy diet or a diet that they termed a "fast food diet," one that was high in saturated fat and cholesterol, along with a sugar-sweetened beverage. Mice on the fast food diet showed harmful changes in health parameters, including body weight and composition, increasing their fat mass by almost 300% over the course of about four months. The fat mass accumulated largely in the mid-section surrounding internal organs,

an area that is often linked to a number of diseases related to obesity. When half of each group of mice were given an exercise wheel, many of these harmful health effects were improved. Even the mice on the fast-food diet showed reduced weight gain and fewer age-related changes in



cellular tissue. Mice on the healthy diet showed improvements in cellular aging as well. The researchers conclude that much of aging is within our control, with cellular senescence often a result of poor diet and lack of exercise.

*Schafer M, White T, Evans G, et al: Exercise prevents diet-induced cellular senescence in adipose tissue. Diabetes 2016; March 16th.*

## Health Risk Is Fat, Not Body Size

People who pack too much body fat, even if they aren't large, have a higher risk of dying early compared to people who have some, but not too much, body fat. Researchers at the University of Manitoba reviewed data on more than 54,000 people who had undergone DXA scans to measure bone density. The DXA scan also provides an estimate of a person's body fat percentage. Men in the top 20% had at least 36% body fat and were up to 59% more likely to die during the seven-year study than were men with a body fat of 28% to 32%. For women, those with a body fat of 39% were 19% more likely to die early compared to women with a body fat in the 30% to 34% range. Only body fat, not BMI measurements, were a tell-tale sign of early death. The researchers conclude

that, "it is important to be attuned to what you're made of, rather than just how much you weigh."

According to a study from Massachusetts General Hospital in Boston, if and how a person gains weight over a lifetime determines cancer risk. Compared to people who maintain a lean-stable weight throughout life, those women who gained weight had a higher risk for colorectal, esophageal, pancreatic, kidney, and endometrial cancers. Men who gained weight throughout life had higher risks for esophageal, colorectal, pancreatic, and prostate cancers.

*Padwal R, Leslie W, Lix L, et al: Relationship among body fat percentage, body mass index and all-cause mortality. Annals of Internal Medicine 2016; March 8th.*

*Song M, Willett W, Hu F, et al: Trajectory of body shape across the lifespan and cancer risk. International Journal of Cancer 2016; 138:2383-2395.*

**HOT TOPIC:** The evidence that calcium helps prevent pre-eclampsia in pregnant women is strong enough that the World Health Organization now recommends supplementation of the mineral, mak-

ing it the first recommended nutritional intervention to prevent this condition, state researchers at Cornell University in Ithaca, NY. *Advances in Nutrition 2016;7:275-278.*



MAY/JUNE 2016

## FDA Warning on Imported Supplements

Beware when it comes to supplements sold in international stores, flea markets, or online, say researchers at the U.S. Food & Drug Administration. Health scammers often target advertising to people who prefer to shop at nontraditional places, using words such as “natural” to inspire trust. There is no legal definition to words

such as this and these claims do not mean that a product is free of hidden drug ingredients or contaminants. Nor does it mean the dosages are safe. Products with the claim, “Made in the USA” are not assured of safety, since it does not guarantee they were made here.

*FDA's Consumer Update Page 2016; March 4th.*

### How Do You Know if It's Fraudulent?

FDA warns you should watch for these claims:

1. One product does it all: Be suspicious of supplements that claim to cure a wide range of diseases.
2. Personal testimonies: Success stories, such as “It cured my diabetes,” or “My tumors are gone,” are easy to make up and are not a substitution for scientific evidence.
3. Quick fixes: Few diseases or conditions can be treated quickly, even with legitimate products. Beware of language, such as “lose 30 pounds in 30 days” or “eliminates skin cancer in days.”
4. “All natural”: Natural is no guarantee of safety. Arsenic is natural, but is a neurotoxin. Plus, FDA has found products promoted as “all natural” that contain hidden or dangerously high doses of prescription drug ingredients.
5. Miracle cure: A real cure would be in the news and prescribed by physicians, not buried in print ads, TV infomercials, or on Internet sites. Beware of “new discovery” or “scientific breakthrough.”
6. FDA-approved: Domestic or imported dietary supplements are not approved by the FDA.

## The Super Junk Food Diet

The American diet is even worse than we thought. According to researchers at the School of Public Health at the University of Sao Paulo in Brazil, more than half of the average American diet is composed of ultra-processed foods. These foods make up 90% of the excess added sugar calories. The researchers reviewed data from more than 9,000 people who participated in the National Health and Nutrition Examination Survey (NHANES-2009-2010). Results showed that added sugar makes up one in every five calories in the average American diet. The recommended added sugar intake is 10% of calories, but Americans consuming these highly-processed foods exceeded this limit 80% of the time. The researchers warn that the health dangers go even farther than the excessive amounts of sugar in these foods. “Ultra-processed foods are chemically designed by the food companies to induce cravings

for those foods, and sugar, fat and sodium are a big part of those formulas,” say the researchers.

One in three Americans drinks at least on sugar-laden soda or juice every day, according to the U.S. Centers for Disease Control and Prevention (CDC).

**IN PERSPECTIVE:** *What are ultra-processed foods? They include sodas, sweet or savory packaged snacks, candy, desserts, packaged baked goods, instant noodles and soups, and reconstituted meat products, such as chicken and fish nuggets, to name only a few. These foods are packed with salt, sugar, oils, fats, and chemicals, such as flavorings, emulsifiers, and other additives designed to artificially mimic real food.*

*Steele E, Baraldi L, Louzada M, et al: Ultra-processed foods and added sugars in the U.S. diet. British Medical Journal Open 2016; March 9th.*

*U.S. Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report 2016; February 26th.*

## IN THE NEWS

- Despite the popular myth, cranberry juice won't cure a urinary tract infection (UTI), state researchers at Texas A&M. Proanthocyanidins are the active ingredients in cranberries, but are only found in cranberry capsules, not in cranberry juice.
- Many foods are potential sources for prevention and treatment of liver cancer, including grapes, black currant, plum, pomegranate, cruciferous vegetables, French beans, tomatoes, asparagus, garlic, turmeric, ginger, soy, rice bran, and some edible mushrooms, state researchers at Sun Yat-Sen University in China.
- More than 15% of older Americans take potentially life-threatening combinations of prescription medications, over-the-counter drugs, and dietary supplements, according to a report from the University of Illinois.

## Vegan Diets Lacking in Nutrients

Vegan diets are popular these days, but could be putting people at nutritional risk unless properly planned, according to a study from the Mayo Clinic in Rochester, Minnesota. In a review of the research, the Mayo study found that vegan diets often are low in vitamins B12 and D, iron, calcium, and the omega-3 fats. These deficiencies have implications in neurologic disorders, anemia, bone strength, memory, heart disease, and more. The researchers recommend that anyone on a vegan diet routinely be checked for blood levels of these nutrients.

**IN PERSPECTIVE:** *According to a 2012 Gallup poll, 2% of the U.S. population follows a vegan diet, which eliminates all animal products and is based solely on fruits, vegetables, nuts, legumes, and grains.*

*Fields H, Ruddy B, Wallace M, et al: How to monitor and advise vegans to ensure adequate nutrient intake. The Journal of the American Osteopathic Association 2016; March 16th.*



## HOT TOPICS

**1** No surprise here: Obese children between the ages of 6- and 19-years-old are at high risk for high blood pressure, elevated blood cholesterol and triglyceride levels, and elevated fasting glucose levels, placing them at high risk for heart disease and diabetes, state researchers at Duke University Medical Center in Durham, North Carolina. *Childhood Obesity* 2016; January 19th.

**2** Diets with high glycemic index scores, suggesting increased intake of processed and refined foods, are associated with a greater risk for depression, according to a study from Isfahan University of Medical Sciences in Iran. *American Journal of Clinical Nutrition* 2016;103:201-209.

**3** Astaxanthin, a carotenoid related to beta carotene, has potent antioxidant capabilities, state researchers at the University of Kiel in Germany. *International Journal of Molecular Science* 2016; January 14th.

**4** Eye drops containing co-enzyme Q10 promote corneal epithelial wound healing in the eyes, state researchers at Baylor College of Medicine in Houston. *Eyes & Contact Lens* 2016; January 16th.

**5** A study from Harvard where more than 124,000 men and women were followed for 24 years found that diets rich in flavonoid-containing foods, such as apples, pears, berries, and peppers, helped with weight loss. For every 10 milligrams of flavonoids consumed daily there was a quarter-pound drop in weight over the years. *British Medical Journal* 2016; January 27th.

**6** Four carotenoids, lutein, zeaxanthin, lycopene, and astaxanthin, appear to show benefits in reducing metabolic complications associated with diabetes, state researchers at the University of Connecticut. *Advances in Nutrition* 2016;7:14-24.

**7** Just one week of supplementing with the omega-3 DHA (3,000 mg/day) reduced muscle soreness and stiffness, and protected against the loss of joint range of motion caused by strenuous exercise in a group of 27 women, according to a study from St. Louis University. *Journal of Sports Science & Medicine* 2016;15:176-183.

**8** According to a study from the Hospital del Mar Medical Research Institute in Barcelona, when people increase the amount of money they spend on food, especially if that reflects increased intake of colorful fruits and vegetables, they maintain healthier weights and lowered risks for health issues, such as diabetes and cardiovascular problems. *British Journal of Nutrition* 2016; January 27th.

**9** Exposure to the chemical in plastics and can linings, called bisphenol A or BPA, increases fertility problems in women. However, consuming soy-based foods, such as tofu, soymilk, or edamame, might protect women from reproductive health issues caused by this chemical. *The Journal of Clinical Endocrinology & Metabolism* 2016; January 27th.

**10** According to a study from the U.S. Centers for Disease Control and Prevention, people who are overweight are at risk for developing asthma. *Current Asthma Prevalence by Weight Status Among Adults* 2016; March 16th.

**11** Long-distance athletes who drink too much water during competition could risk low blood sodium levels, according to a study from the University Hospital of Cologne. *New England Journal of Medicine* 2016; March 10th.

**12** Drinking more water helps a person cut back on sugar, salt, saturated fat, cholesterol, and calories, state researchers at the University of Illinois, Urbana-Champaign. *Journal of Human Nutrition and Dietetics* 2016; March 1st.

**13** Coffee might lower risk for multiple sclerosis with people who drink at least 30 ounces of coffee a day being almost one-third less likely to develop the disease compared to non-drinkers, state researchers at the Karolinska Institute in Stockholm, Sweden. *Journal of Neurology, Neurosurgery & Psychiatry* 2016; March 3rd.

**14** Climate change resulting in lower production of fruits and vegetables could lead to half a million more deaths in adults worldwide, especially in China and India, by 2050, state researchers at The Future of Food at the University of Oxford in England. *Lancet* 2016; March 2nd.

**15** Supplementing the diet with aged garlic extract improves immune function and may be responsible for a reduced severity of colds and flu, state researchers at the University of Florida. *Journal of Nutrition* 2016; January 13th.

**16** The carotenoid, cryptoxanthin, found in tangerines, red peppers, and pumpkin, lowers the risk of some cancers, degenerative diseases, and possibly osteoporosis, state researchers at the University of California, Davis. *Nutrition Reviews* 2016;74:69-82.

**17** Consumption of a diet that mimics the Western diet in fat, refined carbohydrates, protein, and vitamin and mineral levels escalated aging and increased dementia in a study on mice at Tufts University in Boston. *Scientific Reports* 2016; February 18th.

**18** Seniors with mild cognitive impairment who were given daily multivitamins showed improvements in cognitive function and reductions in blood homocysteine levels and depression, in a study from Kyung Hee University in Seoul, Republic of Korea. *Journal of Nursing Scholarship* 2016; February 15th.

**19** Vitamin B12 deficiency was prevalent in patients with chronic tinnitus, while improvements in symptoms were noted when they supplemented with the vitamin, in a study from Integral University in India. *Noise & Health* 2016; 18:93-97.

**20** Researchers at the Centre for Evidence Based Medicine in Oxford, UK warn consumers that despite the health halo, there is no definition for many of the words used on food labels or in the press, including "nutraceutical," "health food," "functional food," and "natural." *British Journal of Clinical Pharmacology* 2016; March 16th.



## Beyond Calcium for Strong Bones

Preventing hip fractures is more than just making sure you get enough calcium and vitamins D and K. According to researchers at the University of Oslo, Norway, optimal intakes of vitamins A, C, and E also are important. Blood was drawn for measurements of vitamins A, B6, B12, C, E, and folic acid as well as for bone turnover markers upon admission to the hospital for hip fractures in 116 patients. This data was compared to 73 controls with no history of hip fracture. Results showed that low blood levels of vitamins A, C, and E were independently linked with a risk for hip fracture. Low vitamin A increased risk by 26%, vitamin C by 6%, and vitamin E by 19%. The researchers speculate that these three vitamins are important in bone turnover mechanisms and are needed to prevent bone loss along with calcium and vitamins D and K.

Torbergsen A, Watne L, Wyller T, et al: *Micronutrients and the risk of hip fracture. Clinical Nutrition 2015; December 23rd.*

### NUTRITION ALERT

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### REVIEW

## Six Ol' Wives' Tales Proven True

Your grandmother was right about many things, even though it's taken science years to provide the proof. Granted, you don't "loose a tooth for every baby," but researchers have now verified that six old wives' tales are worthy advice.

**#1: Fish is Brain Food:** Fatty fish, such as salmon, mackerel, and herring, are rich sources of the omega-3 fats, especially DHA, which improve thinking, reaction times, memory, and possibly even lower Alzheimer's risk by up to 70%. You need at least two servings weekly, or at least 220mg of DHA daily. This fat is so important for brain health that even children should be supplementing if they don't eat fatty fish regularly.

**#2: An Apple a Day Keeps the Doctor Away:** The high levels of phenolics contained in apples work as potent antioxidants to reduce the risk of heart disease and certain cancers. In addition, apples also may protect against Alzheimer's disease, while a compound in apple peel, called ursolic acid, helps keep muscles strong as we age. Very likely these compounds lower inflammation, which then reduces the risk for many chronic diseases. More importantly, a diet packed with a variety of colorful produce is the best insurance against diseases and weight gain down the road.

**#3: Carrots Improve Vision:** Beta carotene in carrots is converted to vitamin A in the body. This vitamin is essential for vision, and a deficiency can lead to night blindness. Though this old wives' tale focuses on carrots, better yet are spinach and other leafy greens, which are excellent sources of beta carotene, as well as other vision-boosting nutrients not found in carrots, such as lutein and zeaxanthin.

**#4: Turkey and/or Warm Milk Help You Sleep Like a Baby:** This is a half truth. Tryptophan - an amino acid found in turkey and milk - is the building block for serotonin, the nerve chemical that aids sleep. However, it is the turkey you ate yesterday that will help you sleep better tonight. Eat an all-carb snack before bedtime, such as air-popped popcorn, and the tryptophan floating around in your system from that turkey burger you ate the day before will be funneled into your brain and converted to serotonin. The reason why warm milk makes some people sleepy, is not because of its tryptophan, but because warm beverages at bedtime slightly raise body temperature, much like an internal warm bath, which relaxes and makes you sleepy.

**#5: Chicken Soup Is Good for the Soul:** Homemade chicken soup helps mitigate the inflammatory response associated with colds and other upper-respiratory infections. Both the vegetables and chicken in soup individually reduce inflammation and curb cold symptoms. Besides, there is nothing better for a woman's soul than weight loss, and studies show that people who eat broth-based soups consume fewer calories, yet feel just as full, so have an easier time losing weight and maintaining the weight loss.

**#6: Tomatoes Are an Aphrodisiac:** Italians didn't get the reputation for being some of the world's best lovers for nothing! Their tomato-rich diet is loaded with a compound called lycopene that has been proven to lower prostate cancer risk. However, tomatoes are not the only, or even the best, source of lycopene. Actually, cup for cup, watermelon has more lycopene than fresh tomatoes.

*Canadian Journal of Physiology and Pharmacology 2016; January 16th/ Evidence Based Complementary Alternative Medicine 2015;2015:105256/Chest 2000/118:1150-1157.*

**HOT TOPICS:** Diets rich in colorful fruits and vegetables lower hypertension risk, with broccoli, carrots, and apples topping the list, along with tofu and soybeans, in a study from Brigham and Women's Hospital in Boston. *Hypertension 2016; 67:288-293.*

Poor magnesium intake during pregnancy resulted in impaired placental size and function, potentially affecting the lifelong health and viability of offspring, in a study on mice at New York University Medical Center. *Placenta 2016;39:87-93.*